

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Appellant:	William C. Phillips; Jeremy J. Odegard; Michael W. Horvath	Confirmation No.	9336
Serial No.:	10/693,001		
Filed:	October 24, 2003	Customer No.:	28863
Examiner:	Christopher A. Flory	Group Art Unit:	3762
Docket No.:	1023-291US01		
Title:	NEUROSTIMULATOR PROGRAMMER WITH CLOTHING ATTACHABLE ANTENNA		

REPLY BRIEF

Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450,
Alexandria, VA 22313-1450

Sir:

This is a Reply Brief responsive to the final Office Action mailed June 13, 2008, the Advisory Action mailed March 17, 2008, and the Examiner's Answer dated February 23, 2009. The due date for this Reply Brief is April 23, 2009.

No fees are believed to be due at this time. Please charge any fees that may be required or credit any overpayment to Deposit Account No. 50-1778.

TABLE OF CONTENTS

	<u>Page</u>
Status of Claims.....	3
Ground of Rejection to be Reviewed on Appeal	4
Argument	6

STATUS OF CLAIMS

Claims 1–9 and 11–35 are pending and the subject of this appeal. Claims 1–9 and 11–35 are set forth in the Claims Appendix of the previously filed Appeal Brief. The originally filed application included claims 1–15. Claims 16–26 were added in a Preliminary Amendment filed on March 9, 2004; claims 27–29 were added in an Amendment filed on June 5, 2006; and claims 30–35 were added in an Amendment filed on July 20, 2008. Originally filed claim 10 was canceled in an Amendment filed on November 22, 2006.

Claims 1–8, 16, 18–27, and 29–35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Cimochoowski et al. (U.S. Patent No. 5,967,986; hereafter “Cimochoowski”) in view of Wallerstorfer et al. (U.S. Patent No. 5,478,995; hereafter “Wallerstorfer”) or in view of Lippert (U.S. Patent No. 6,634,563) or in view of McEowen (U.S. Patent No. 6,810,237).

Claims 9, 11–23, 25, 26, 28, 29, and 33–35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Pool et al. (U.S. Patent No. 6,561,975; hereafter “Pool”) in view of Lippert or in view of Wallerstorfer or in view of McEowen.

Claims 1–9 and 11–35 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Taepke, II et al. (U.S. Patent No. 6,650,939; hereafter “Taepke”) in view of Lippert or in view of Wallerstorfer or in view of McEowen.

GROUND OF REJECTION TO BE REVIEWED ON APPEAL

Appellant submits the following grounds of rejection to be reviewed on appeal:

- (1) The first ground of rejection to be reviewed on appeal is the rejection of claims 1–8, 16, 18–27, and 29–35 under 35 U.S.C. § 103(a) as being unpatentable over Cimochoowski in view of Wallerstorfer.
- (2) The second ground of rejection to be reviewed on appeal is the rejection of claims 1–8, 16, 18–27, and 29–35 under 35 U.S.C. § 103(a) as being unpatentable over Cimochoowski in view of Lippert.
- (3) The third ground of rejection to be reviewed on appeal is the rejection of claims 1–8, 16, 18–27, and 29–35 under 35 U.S.C. § 103(a) as being unpatentable over Cimochoowski in view of McEowen.
- (4) The fourth ground of rejection to be reviewed on appeal is the rejection of claims 9, 11–23, 25, 26, 28, 29, and 33–35 under 35 U.S.C. § 103(a) as being unpatentable over Pool in view of Lippert.
- (5) The fifth ground of rejection to be reviewed on appeal is the rejection of claims 9, 11–23, 25, 26, 28, 29, and 33–35 under 35 U.S.C. § 103(a) as being unpatentable over Pool in view of Wallerstorfer.
- (6) The sixth ground of rejection to be reviewed on appeal is the rejection of claims 9, 11–23, 25, 26, 28, 29, and 33–35 under 35 U.S.C. § 103(a) as being unpatentable over Pool in view of McEowen.
- (7) The seventh ground of rejection to be reviewed on appeal is the rejection of claims 1–9 and 11–35 under 35 U.S.C. § 103(a) as being unpatentable over Taepke in view of Lippert.

(8) The eighth ground of rejection to be reviewed on appeal is the rejection of claims 1–9 and 11–35 under 35 U.S.C. § 103(a) as being unpatentable over Taepke in view of Wallerstorfer.

(9) The ninth ground of rejection to be reviewed on appeal is the rejection of claims 1–9 and 11–35 under 35 U.S.C. § 103(a) as being unpatentable over Taepke in view of McEowen.

ARGUMENT

In the Examiner's Answer to Appellant's Appeal Brief, the Examiner provided a clarification of the rejection of the claims in the Response to Argument section, which begins on page 12 (item 10) of the Examiner's Answer. For brevity, this Reply Brief only addresses aspects of these new arguments. Accordingly, this Reply Brief is not intended to address all arguments provided in the Examiner's Answer, and Appellant requests full consideration of all arguments set forth in the Appeal Brief filed on December 9, 2008.

The Examiner noted that claim amendments to overcome the cited art were suggested during an interview between Appellant's representative and Examiner that was conducted after the final Office Action dated June 23, 2008, and that Appellant "seems to agree on this point in the Applicant summary filed 10 October 2008," but did not make the proposed amendments.¹ For various reasons, Appellant decided not to amend the claims prior to filing the Notice of Appeal. Appellant clarifies for the record that any claim amendments that were discussed but not implemented via an Amendment are neither the subject of the present appeal nor relevant to whether the Examiner's final rejection of Appellant's claims 1–9 and 11–35 was proper.

In the Examiner's Answer, the Examiner asserted that in Appellant's claims, "the intention that the friction fit [between an antenna for a medical device programmer and clothing associated with a patient] would consequently hold the antenna in a substantially fixed position relative to an implantable medical device . . . would rely in great part on the type of clothing being worn."² As an example, the Examiner stated that "[a]ttaching an antenna to loose or baggy clothing . . . would not hold the antenna fixed relative to an implanted device, but only relative to the clothing itself."³ The Examiner's assertion is incorrect and should not be taken as an assertion that is generally true in all instances.

Regardless of the looseness or bagginess of clothing of a patient, Appellant's claimed antenna is configured to be held in a substantially fixed position relative to an implantable medical device. According to the claims, the antenna is configured such that a portion of the clothing may be held in a channel defined by an antenna to maintain this relationship between

¹ Examiner's Answer at page 13, item 10.

² *Id.*

³ *Id.*

the antenna and the implantable medical device. As shown in FIG. 6B of Appellant's disclosure (a modified version is reproduced below), an antenna 74 is configured such that a portion of clothing (labeled below) may be selected to be held by the antenna and to hold the antenna in a substantially fixed position relative to an implantable medical device. Thus, the portion of the clothing that is introduced into the antenna channel affects how the antenna is held relative to an implantable medical device, rather than the general fit of the item of clothing on the patient.

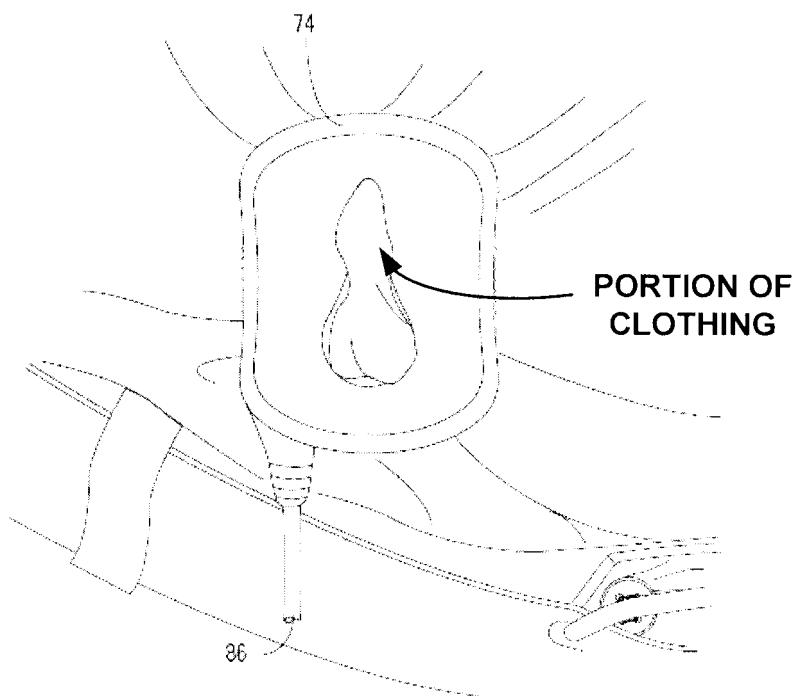


FIG. 6B

While there may be some portions of baggy or loose clothing that are not suitable to hold Appellant's claimed antenna in a substantially fixed position relative to an implantable medical device, the Examiner's general assertion that Appellant's claimed antenna would not hold an antenna fixed relative to an implanted device if the patient is wearing baggy or loose clothing is incorrect.

In the Response to Appellant's Arguments provided in the Examiner's Answer, the Examiner asserted that Applicant has mischaracterized the claimed invention. In particular, the

Examiner stated that “Applicant has evidently mischaracterized their own claim language in thinking that the recitation of ‘antenna’ relates to the internal wire structure of the overall device responsible for wireless transmission of the electrical signal.”⁴ On this basis, the Examiner stated that “each argument presented by the Applicant can be considered moot.”⁵ Appellant respectfully disagrees with the Examiner. Appellant has not mischaracterized any claim language. Accordingly, the arguments presented in the Appeal Brief have not been rendered moot.

To the extent that Appellant’s Appeal Brief may appear to suggest that the claims require an “internal wire structure” to define the recited aperture, Appellant clarifies that, in agreement with the Examiner, the recited “antenna” in Appellant’s claims is directed toward the overall antenna device. However, Appellant notes that the claims are not directed to any device that includes an antenna and defines an aperture comprising a wide end and a narrower channel adjacent the wide end. Instead, Appellant’s claims are directed to an antenna, which includes an antenna loop or other “internal wire structure,” that defines an aperture comprising a wide end and a narrower channel adjacent the wide end.

As discussed in further detail in the Appeal Brief filed on December 9, 2008, the Examiner is incorrectly characterizing any device that includes an antenna and a separate fixation element that defines an aperture as an “antenna” in accordance with Appellant’s claims. For example, the Examiner relied on Wallerstorfer and Lippert as disclosing an antenna defining an aperture comprising a wide end and a channel adjacent the wide end. These references, however, each disclose a device that includes an antenna and a separate fixation element that defines an aperture. Notably, in Wallerstorfer and Lippert, the device that includes an antenna loop or other “internal wire structure” does not define the aperture.

Wallerstorfer discloses a data carrier that includes an antenna. Wallerstorfer discloses that a separate fastening mechanism can be used to hang the data carrier on a piece of clothing.⁶ The Examiner characterized the fastening mechanism as defining an “aperture” in accordance

⁴ *Id.* at page 14, item 10.

⁵ *Id.* at page 16, item 10.

⁶ *See* Wallerstorfer at col. 5, ll. 34 and 35, FIG. 2 (illustrating a device including an antenna 16), and FIG. 10 (illustrating the fastening mechanism 30).

with, e.g., Appellant's claim 1.⁷ The data carrier does not define the aperture, and, therefore, cannot reasonably be characterized as an antenna defining an aperture in accordance with Appellant's claims. Moreover, even if the fastening mechanism defines an aperture in accordance with Applicant's claims, the fastening mechanism cannot reasonably be characterized as an antenna. For example, the fastening mechanism does not include an antenna loop or other "internal wire structure."

Lippert describes an identity card that includes an antenna and a separate loop (e.g., used to attach the identity card to an aperture in clothing⁸) that is not part of the identity card.⁹ As with Wallerstorfer, the identity card does not define an aperture, and, therefore, cannot reasonably be characterized as an antenna defining an aperture in accordance with Appellant's claims. In addition, even if the loop defines an aperture in accordance with Applicant's claims, the loop is separate from the identity card that includes the antenna, and, therefore, cannot reasonably be characterized as an antenna in accordance with Appellant's claims.

For at least reasons, Wallerstorfer and Lippert do not disclose or suggest an antenna defining an aperture comprising a wide end and a channel adjacent the wide end, as required by Appellant's claims. Wallerstorfer and Lippert merely disclose fastening mechanisms that are separate from the device that includes an antenna loop or other "internal wire structure."

Even if Wallerstorfer and Lippert each disclose a device defining an aperture comprising a wide end and a channel adjacent the wide end, wherein the channel is narrower than the wide end, an assertion with which Appellant does not agree, modifying Cimochoowski, Pool or Taepke in view of Wallerstorfer and Lippert, as suggested by the Examiner, would not result in a device including each and every element of Appellant's claims. For example, if Cimochoowski was modified in view of Wallerstorfer, the resulting device would not include an antenna that defines an aperture comprising a wide end and a narrower channel adjacent the wide end. Instead, the resulting device would include the external coil disclosed by Cimochoowski and a fastening element 30 that is used to attach the external coil to a piece of clothing.

⁷ Final Office Action dated June 13, 2008 at page 5, lines 15–20.

⁸ Lippert at Abstract.

⁹ *Id.*

Neither Cimochoowski nor Wallerstorfer discloses or suggests modifying the shape of the external coil disclosed by Cimochoowski in the manner proposed by the Examiner. Instead, Wallerstorfer merely disclose a fastening element that can be used to attach a data carrier that includes an antenna to a piece of clothing,¹⁰ and Cimochoowski discloses an external coil that defines a wide, open, circular aperture capable of wrapping around relatively large portions of a patient's body.¹¹

Similarly, if Cimochoowski was modified in view of Lippert, the resulting device would include the external coil disclosed by Cimochoowski and a loop separate from the external coil, where the loop is used to attach the external coil to an aperture in clothing of a user. Neither Cimochoowski nor Lippert discloses or suggests modifying the shape of the external coil disclosed by Cimochoowski in the manner proposed by the Examiner.

In the Examiner's Answer, the Examiner asserted that "there is absolutely no recitation within the claims regarding the position of the actual transmission loop relative to the aperture."¹² Appellant respectfully disagrees. Claims 30 and 33 each clarify that an antenna comprises a housing defining the aperture and an antenna loop disposed within the housing. Thus, claims 30 and 33 specify a relationship between a housing that defines an aperture and the antenna loop. Neither Wallerstorfer nor Lippert or McEowen discloses or suggests a housing that both defines an aperture and includes an antenna loop.

For example, while Wallerstorfer discloses a data carrier 50 that includes a housing with an antenna 16,¹³ the housing does not define an aperture. Instead, according to the Examiner, a fastening element 30 defines the aperture. As shown in FIG. 2 of Wallerstorfer, the antenna 16 is not enclosed within the fastening element 30. Thus, contrary to the requirements of Appellant's claims 30 and 33, Wallerstorfer does not disclose an antenna comprising a housing defining the aperture and an antenna loop disposed within the housing.

¹⁰ Wallerstorfer at col. 5, ll. 34–35.

¹¹ Cimochoowski at col. 16, ll. 1–9 and FIG. 12.

¹² Examiner's Answer at page 16, item 10.

¹³ Wallerstorfer at col. 4, ll. 31–36 and FIG. 2.

As another example, Lippert discloses an identity card that includes an antenna 6 attached to a section 4 and a separate loop 9 attached to the section 4.¹⁴ Even if the loop 9 disclosed by Lippert defines an aperture comprising a wide end and a narrower channel adjacent the wide end, an assertion with which Appellant disagrees, the antenna 6 is not disposed within the loop 9. Thus, Lippert fails to disclose an antenna comprising a housing defining the aperture and an antenna loop disposed within the housing, as required by Appellant's claims 30 and 33. McEowen also fails to disclose or suggest an antenna that includes a housing that defines an aperture comprising a wide end and a channel adjacent the wide end. McEowen discloses a lanyard antenna that neither comprises a housing defining an aperture nor a separate antenna loop disposed within the housing.

Contrary to the Examiner's assertion, Appellant's arguments are valid even if the claimed "antenna" refers to a device that includes an antenna loop or other "internal wire structure," rather than the "internal wire structure" itself. For at least these reasons and the reasons discussed in Appellant's Appeal Brief, the Examiner has failed to establish a *prima facie* case for obviousness of Appellant's claims 1–9 and 11–35. In view of Appellant's arguments, the final rejection of claims 1–9 and 11–35 is improper and should be reversed, and all of the pending claims should be allowed.

¹⁴ Lippert at col. 3, ll. 60–65, col. 4, ll. 9–14, and FIG. 3.

CONCLUSION

The Examiner has failed to meet the burden of establishing a *prima facie* case of obviousness with respect to claims 1–9 and 11–35. In view of Appellant’s arguments present in this Reply Brief and in the previously-filed Appeal Brief, the final rejection of Appellant’s claims is improper and should be reversed. Reversal of all pending rejections and allowance of all pending claims is respectfully requested.

Date:

By:

April 23, 2009
SHUMAKER & SIEFFERT, P.A.
1625 Radio Drive, Suite 300
Woodbury, Minnesota 55125
Telephone: 651.283.8346
Facsimile: 651.735.1102

Jessica H. Kwak
Name: Jessica H. Kwak
Reg. No.: 58,975